

We Claim:

1. A mobile system responsive to a user generated natural language speech utterance, comprising:
 - a speech unit that receives the user generated natural language speech utterance and converts the user generated natural language speech utterance into an electronic signal, said user generated natural language speech utterance having at least one of a query and a command;
 - a natural language speech processing system that receives the electronic signal, that retrieves said at least one of said query and said command from the electronic signal, that selects at least one domain agent associated with said at least one of said query and said command, that forwards said at least one of query and command to said at least one domain agent, wherein said at least one domain agent is an autonomous executable that receives, processes and responds to said at least one of said query and a said command; and
 - a transceiver, in communication with said at least one domain agent, that transmits an electronic message associated with said at least one of query and command.
2. The mobile system according to claim 1, wherein the natural language speech processing system further comprises an event manager, said event manager coordinating interaction between components of the natural language speech processing system.

3. The mobile system according to claim 1, wherein the natural language speech processing system further comprises a parser that determines a domain for the user generated natural language utterance based on the content and context of the user utterance.
4. The mobile system according to claim 1, further comprising a text to speech engine that converts a text message to a speech message.
5. The mobile system according to claim 1, wherein said at least one domain agent includes information for communicating with a remotely located service.
6. The mobile system according to claim 1, wherein said at least one domain agent includes data associated with at least one of driving directions, travel information, restaurant information, vehicle systems information, safety information and entertainment information.
7. The mobile system according to claim 1, wherein said at least one domain agent includes data for communicating with one or more devices.
8. The mobile system according to claim 7, wherein the data for communicating includes data for controlling the one or more devices.
9. The mobile system according to claim 7, wherein the transmitted electronic message is sent to the one or more devices.
10. The mobile system according to claim 9, wherein at least one of the devices is a device associated with a vehicle.

11. The mobile system according to claim 10, wherein the mobile system is located remotely from the vehicle.
12. The mobile system according to claim 10, wherein the device associated with the vehicle is at least one of a navigation system, a vehicle monitoring system, a security system, a vehicle control system and a vehicle media system.
13. The mobile system according to claim 1, wherein the transmitted message is sent to at least one remotely located service.
14. The mobile system according to claim 13, wherein the remotely located service is one of payment service provider, customer relationship management system, specialized service, location service and emergency service.
15. The mobile system according to claim 13, wherein the transceiver transmits the message via a communication network.
16. The mobile system according to claim 15, wherein the communication network is a wide area wireless network.
17. The mobile system according to claim 1, wherein the transceiver is a wide-area RF transceiver.
18. The mobile system according to claim 1, wherein the speech unit includes at least one of a speech coder, an array microphone and a filter.
19. The mobile system according to claim 18, wherein the filter employs adaptive echo cancellation.

20. The mobile system according to claim 18, wherein the array microphone is at least a one-dimensional array.

21. The mobile system according to claim 18, wherein the speech coder uses an adaptive lossy audio compression.

21. The mobile system according to claim 1, wherein the speech unit is located remotely from the natural language speech processing system and the transceiver.

23. The mobile system according to claim 1, further comprising at least one of a display and a keypad.

24. The mobile system according to claim 1, further comprising a telematics control unit.

25. The mobile system according to claim 1, wherein the mobile system is embedded in a telematic control unit.

26. The mobile system according to claim 1, wherein the mobile system is embedded into at least one of a vehicle, a handheld device, a fixed computer and a mobile computer device.

27. The mobile system according to claim 1, wherein the mobile system is deployed in a network of devices using a common base of at least one of agents, user profiles and event histories.

28. A method responsive to a user generated natural language speech utterance, comprising:

receiving the user generated natural language speech utterance, the user generated natural language speech utterance having at least one of a query and a command;

converting the user generated natural language speech utterance into an electronic signal;

retrieving said at least one of said query and said command from the electronic signal;

selecting a domain agent associated with said at least one of said query and said command;

forwarding said at least one of said query and said command to said domain agent, wherein said domain agent is an autonomous executable that receives, processes and responds to said at least one of said query and said command;

and

transmitting a message associated with said at least one of said query and said command to a remotely located service.

29. The method according to claim 28, further comprising coding the electronic signal.

30. The method according to claim 28, further comprising

selecting a second domain agent, the second domain agent associated with at least one of a navigation system, a vehicle monitoring system, a security system, a vehicle control system and a vehicle media system; and

forwarding a second message to said second domain agent.

31. The method according to claim 28, wherein said domain agent includes data associated with at least one of driving directions, travel information, restaurant information, vehicle systems information, safety information and entertainment information.

32. The method according to claim 28, wherein said domain agent includes information for communicating with the remotely located service.

33. The method according to claim 32, wherein the transmitting operation includes sending at least one of a query and a command to the remotely located service.

34. The method according to claim 28, wherein the device system is a remotely located device.

35. The method according to claim 28, wherein the transmitting operation with the remotely located service is via a network.

36. The method according to claim 28, wherein the remotely located service is one of a payment service provider, a customer relationship management system, a specialized service, a location service and a emergency service.

37. The method according to 28, wherein the transmitting operation with the remotely located service is via a wide-area RF transceiver.

38. The method according to 28, further comprising filtering-out background noise of the received user utterance.

39. The method according to 38, wherein the filtering-out operation is by at least using a filter employing adaptive echo cancellation.

40. The method according to claim 29, wherein the user generated natural language speech utterance is coded using an adaptive lossy audio compression.

41. The method according to claim 28, wherein the receiving operation of the user generated natural language speech utterance is remotely performed from the other operations.

42. The method according to claim 41, wherein the receiving operation of the user generated natural language speech utterance is performed in a vehicle.

43. The method according to claim 28, further comprising retrieving data from a network shared source, the network shared source is at least one of an agent, a user profile and a events history.

R. 1126 44-45. A mobile system responsive to a user generated natural language speech utterance, comprising:

receiving means that receives the user generated natural language speech

utterance, the user generated natural language speech utterance having at least one of a query and a command;

converting means that converts the user generated natural language speech utterance into an electronic signal;

retrieving means that retrieves said at least one of said query and said command

domain agent selecting means that selects a domain agent associated with said at

least one of said query and said command;

forwarding means that forwards said at least one of said query and said command

to said selected domain agent; and

transmitting means that transmits a message from said selected domain agent to a

device system.

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44. The mobile system according to claim 43, wherein the device system is at least one of a navigation system, a vehicle monitoring system, a security system, a vehicle control system and a vehicle media system.

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45. The mobile system according to claim 43, wherein the at least one domain agent includes data associated with at least one of driving directions, travel information, restaurant information, vehicle systems information, safety information and entertainment information.

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46. The mobile system according to claim 43, wherein the device system is a remotely located device.

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47. The mobile system according to claim 43, wherein the device system is a remotely located service.

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48. The mobile system according to claim 47, wherein the transmitting means communicates with the remotely located service via a network.

49. The mobile system according to claim 47, wherein the remotely located service is one of a payment service provider, a customer relationship management system, a specialized service, a location service and a emergency service.

50. The mobile system according to 43, wherein the transmitting means is a wide-area RF transceiver.

51. The mobile system according to 43, further comprising a filtering means that filters the received user generated natural language speech utterance.

R.1/26 52. The mobile system according to claim 43, further comprising a coder means that codes the user generated natural language speech utterance.

53. The mobile system according to claim 43, wherein the receiving means is remotely located from other mobile system components.

54. The mobile system according to claim 53, wherein the receiving means is located at a vehicle.

55. The mobile system according to claim 43, further comprising data retrieving means that retrieves data from a network shared source, the source is at least one of an agent, data, a user profile and a events history.